

Listing of Claims

Amendments To The Claims:

The following listing of claims replaces all previous listings or versions thereof:

1. – 4. (Canceled)

5. (Currently amended) A method of treating cancer in a human patient in need of such treatment comprising the steps of:

(a) determining that the cells of the patient's cancer express a selected cell surface associated antigen that can be recognized and bound by a protein with an antigen recognition site directed to the antigen; and

(b) administering to such patient a patient determined to have a cancer whose cells express such an antigen a cytocidally effective dose of a composition comprising a protein with an antigen recognition site directed toward a cell surface associated antigen said protein conjugated or fused to a biological response modifier, ~~wherein it has been determined that cells of the patient's cancer express an antigen recognized and bound by the protein.~~

6. (Canceled)

7. (Previously presented) The method of claim 5, wherein said cancer is selected from the group consisting of breast cancer, cervical carcinoma and melanoma.

8. (Withdrawn) The method of claim 7, wherein the patient has been diagnosed as having a breast tumor bearing a 15A8 tumor associated antigen and the protein [antibody] is a monoclonal antibody that recognizes and binds to the 15A8 tumor associated antigen.

9. (Withdrawn) The method of claim 7, wherein the patient has been diagnosed with a cervical carcinoma bearing a 15A8 tumor associated antigen and the protein is a monoclonal antibody that recognizes and binds to the 158A tumor associated antigen.

10. (Currently amended) The method of claim 7, wherein the patient has been diagnosed with cancer and cells of the cancer express an antigen recognized by monoclonal antibody ZME-018 (ATCC accession number HB 11009), and further wherein the protein is a monoclonal antibody that recognizes and binds the antigen.

11. – 12. (Canceled)

13. (Previously Presented) The method of claim 5, wherein the biological response modifier is a cytokine.

14. (Previously Presented) The method of claim 13, wherein the cytokine is TNF.

15. (Withdrawn) The method of claim 14, wherein the TNF is TNF-beta.

16. (Previously Presented) The method of claim 14, wherein the TNF is TNF-alpha.

17. (Withdrawn) The method of claim 13, wherein the cytokine is an interleukin.
18. (Withdrawn) The method of claim 17, wherein the interleukin is interleukin-1 or interleukin-6.
19. (Withdrawn) The method of claim 13 wherein the cytokine is an interferon.
20. (Withdrawn) The method of claim 5, wherein the protein's antigen recognition site recognizes and binds to the 15A8 tumor associated antigen.
21. (Currently amended) The method of claim 5, wherein the protein's antigen recognition site recognizes and binds to the ZME-018 antigen, an antigen recognized by monoclonal antibody ZME-018 (ATCC accession number HB 11009).
22. (Withdrawn) The method of claim 5, wherein the protein's antigen recognition site recognizes and binds to the antigen recognized by the 465.12 antibody.
23. (Previously presented) The method of claim 5, wherein the protein with an antigen recognition site is fused to the biological response modifier.
24. (Previously presented) The method of claim 5, wherein the protein with an antigen recognition site is conjugated to the biological response modifier.

25. (Currently amended) The method of claim 14, wherein the protein's antigen recognition site recognizes and binds to the ZME-018 antigen, an antigen recognized by monoclonal antibody ZME-018 (ATCC accession number HB 11009).

26. (Previously presented) The method of claim 5, further defined as comprising the steps of:

(a) identifying a patient having a tumor, which tumor comprises cells for targeting and wherein those cells comprise a cell surface antigenic marker at concentrations in excess of that found at other non-target sites;

(b) obtaining a composition comprising a protein with an antigen recognition site directed toward a cell surface associated antigen conjugated or fused to the biological response modifier, wherein it has been determined that cells of the patient's cancer express an antigen recognized and bound by the protein with an antigen recognition site; and

(c) administering an amount of the composition to the patient effective to treat the cancer.

27. (Previously presented) The method of claim 26, wherein the patient is diagnosed as having a tumor with a specific antigenic determinant that will allow targeting and concentration of the biological response modifier at the site where it is needed to kill tumor cells.

28. (Previously presented) The method of claim 5, wherein the protein is an antibody.

29. (Previously presented) The method of claim 28, wherein the antibody is a monoclonal antibody.